CLAIMS

WHAT IS CLAIMED IS:

Sub a1

1. A method for steganographically combining data, comprising the steps of:

acquiring first data via a data source;

acquiring from the data source meta-data associated with the acquired first data; and

combining the acquired first data and the acquired meta-data into steganographic data, wherein a difference between the steganographic data and the acquired first data is imperceptible.

2. The method according to claim 1, further comprising the step of:

storing the steganographic data.

3. The method according to claim 2, wherein the steganographic data is stored in memory coupled with the data source.

4. The method according to claim 2, wherein the steganographic data is stored at a location remote from the site where the first data and meta-data are acquired.

5. The method according to claim 1, further comprising the step of:

transmitting the steganographic data to the remote location.

6. The method according to claim 1, wherein the step of combining produces one or more steganographic data combinations.

7. The method according to claim 6, further comprising the step of:
evaluating each of the one or more steganographic data combinations to determine the one combination that most closely matches the acquired first data.

8. The method according to claim 7, further comprising the conditional step of:
if all of the one or more steganographic data combinations perceptibly differ from the acquired data, then repeating the step of combining.

9. The method according to claim 1, whereby the step of acquiring meta-data is substantially completed before acquiring another first data.

10. The method according to claim 1, wherein at least a portion of the acquired meta-data is related to information received from a user.

11. The method according to claim 1, wherein:
the first data comprises an electro-optical image produced by a component of a digital camera.

12. The method according to claim 11, wherein:
the meta-data relates to one or more of identification of the acquired image, parameter settings of the digital camera, the environment in which the image is acquired, and a spatial description of the camera.

13. The method according to claim 1, further comprising the step of:

pre-processing the meta-data by hashing the meta-data, encrypting the meta-data, or encrypting the hashed meta-data.

14. The method according to claim 1, wherein the first data and the meta-data are acquired via the data source at approximately the same time.

15. A device for generating steganographic data, comprising:
a first suite of sensors configured to acquire data;
a second suite of sensors configured to acquire meta-data, wherein the meta-data is associated with the acquired data;
a steganographic engine configured to combine the acquired data and the acquired meta-data to form steganographic data, wherein the steganographic data differs imperceptibly from the acquired data.

16. The device according to claim 15, further comprising:
a memory configured to store the steganographic data.

17. The device according to claim 15, wherein the steganographic data comprises one or more different steganographic data combinations obtained using different combination algorithms.

18. The device according to claim 17, further comprising:
a figure-of-merit tester configured to determine one of the one or more steganographic data combinations that differs the least from the acquired data.

19. The device according to claim 15, wherein the second suite of sensors further comprise:
a user interface configured to receive information from a user of the device.

20. The device according to claim 19, wherein the user interface further comprises: one or more different kinds of input devices configured to interact with the user interface.

21. The device according to claim 15, further comprising:
a communications interface configured to transmit the steganographic data to a location remote from the device.

22. The device according to claim 15, wherein the second suite of sensors is controlled to complete acquiring the meta-data before the first suite of sensors acquires other data.

23. The device according to claim 15, wherein the meta-data comprises hashed and encrypted meta-data portions.

24. A digital camera for steganographically combining meta-data, comprising:
a image plane configured to acquire an electro-optical image;
a suite of sensors configured to acquire meta-data, said meta-data is associated with the electro-optical image;
a steganographic engine configured to combine the electro-optical image and the meta-data to form steganographic data, said steganographic data differing imperceptibly from the electro-optical image.

25. The digital camera according to claim 24, further comprising:
memory configured to store the steganographic data.

26. The digital camera according to claim 24, wherein the steganographic data comprises one or more different steganographic data combinations obtained using different combination algorithms.

27. The digital camera according to claim 26, further comprising:
a figure-of-merit tester configured to determine one of the one or more steganographic data combinations that differs the least from the electro-optical image.

28. The digital camera according to claim 24, further comprising:
a display area configured to display information related to the meta-data.

29. The digital camera according to claim 24, further comprising:
a display area configured to display information related to the steganographic data.

30. The digital camera according to claim 24, wherein the suite of sensors is configured to acquire meta-data related to one or more of camera angle, geographical location, environmental conditions, date and time, image subject identification and image parameter settings.

31. The digital camera according to claim 24, wherein the meta-data comprises hashed and encrypted meta-data portions.